

COVID-19 Outbreaks in Washington State K-12 Schools

Washington State Department of Health

February 11, 2021

Executive Summary

- This report describes COVID-19 outbreaks in K-12 schools that were reported to the Washington State Department of Health (DOH).
- A total of 84 COVID-19 outbreaks occurred in K-12 schools between August 1, 2020 and December 31, 2020.
- 305 COVID-19 cases were associated with outbreaks in K-12 schools. Sixty four percent of COVID-19 outbreaks involved two or three cases.
- Half of COVID-19 cases were students aged 18 and under.

Methods

This report was created using information from COVID-19 test results, COVID-19 outbreaks reported by local health jurisdictions to DOH, and DOH interviews with K-12 school administrators or COVID-19 coordinators. The investigation of COVID-19 cases to confirm that a cluster meets Washington State's outbreak definition is time intensive, therefore, the number of cases and outbreaks reported by a local health jurisdiction may change over time as outbreak details become available.

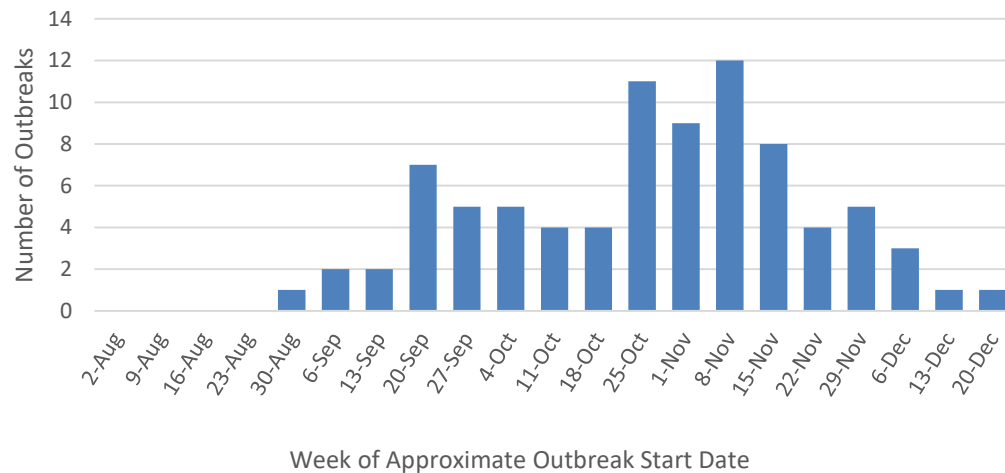
Definition of a COVID-19 Outbreak in Washington State K-12 Schools

A COVID-19 outbreak in a K-12 school is considered when the following criteria have been met:

- There are two or more laboratory-positive (PCR or antigen) COVID-19 cases among students or staff.
- The cases have a symptom onset within a 14-day period of each other.
- The cases are epidemiologically linked.
- The cases do not share a household.
- The cases are not identified as close contacts of each other in another setting.

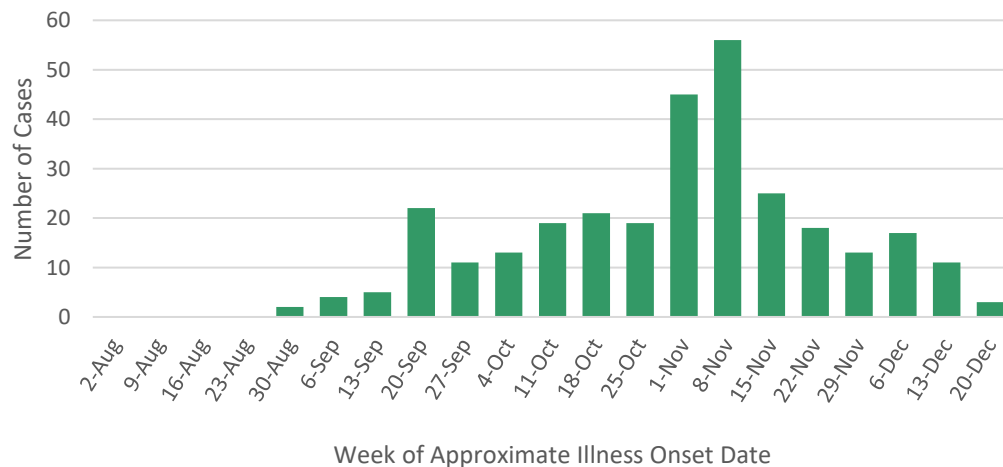
COVID-19 outbreaks in Washington State K-12 schools, by week of approximate outbreak start date

The following epidemiologic curve shows the weekly count of the 84 COVID-19 outbreaks in Washington State K-12 schools between August 1, 2020 and December 31, 2020.



Cases associated with COVID-19 outbreaks in Washington State K-12 schools, by week of approximate illness onset date

The following epidemiologic curve shows the week of approximate illness onset of the 305 COVID-19 cases that were associated with outbreaks in K-12 schools. The approximate illness onset date is defined as the date when a case's COVID-19 symptoms began. If the case was asymptomatic, or the symptom start date is unknown, the illness onset date is when the case was tested for COVID-19.



COVID-19 outbreaks in Washington State K-12 schools, by county

Local health jurisdictions reported 84 COVID-19 outbreaks that occurred in K-12 schools across thirteen counties between August 1, 2020 and December 31, 2020. The number of outbreaks by county ranged from 1 to 33. A total of 305 COVID-19 cases were associated with these outbreaks. The median number of cases per outbreak was three. Sixty four percent of all outbreaks involved two or three cases. The smallest outbreak involved two cases, and the largest involved 13.

County	Number of Outbreaks	Number of Associated Cases	Median Cases Per Outbreak
Benton	4	9	3
Clark	11	24	2
Cowlitz	2	4	2
Franklin	4	9	2
King	7	20	2
Kitsap	5	18	2
Skagit	1	2	2
Snohomish	12	53	3
Spokane	33	151	5
Stevens	1	2	2
Thurston	1	2	2
Walla Walla	1	2	2
Whitman	2	9	5
Total	84	305	3

Characteristics of Washington State K-12 schools that experienced a COVID-19 outbreak

Among the 84 K-12 schools that experienced a COVID-19 outbreak, 26 (31%) were private, and 58 (69%) were public. At the time of their outbreak, five schools reported a fully remote instructional model; 10 schools were teaching fully in-person; 19 schools were using a hybrid instructional model; and 10 schools were primarily remote with exceptions for some groups of students, such as those with special learning needs. A hybrid model includes schools that were alternating in-person learning with remote learning, using phased in grade levels, or some combination of both. The remaining 40 outbreaks either reported another learning modality or data on their learning modality was unavailable.

	N	%
Public/Private		
Public	58	69
Private	26	31
Learning Modality		
In Person	10	12
Hybrid	19	22
Remote	5	6
Remote with exceptions*	10	12
Other/Unknown	40	48

* Exceptions include in person learning for students with special learning needs

Characteristics of cases associated with COVID-19 outbreaks in Washington State K-12 schools

Among the 305 COVID-19 cases that were linked to outbreaks in K-12 schools, half were students aged 18 years or younger. Forty two percent of COVID-19 cases were Non-Hispanic White, and 61% were female. Zero COVID-19 cases were hospitalized overnight, and there were zero reported deaths.

	N	%
Median Age	18	NA
Age Group		
5 - 9	53	17
10 - 14	52	17
15 - 19	48	16
20 - 29	14	5
30 - 39	28	9
40 - 49	43	14
50 - 59	39	13
60+	28	9
Race/Ethnicity		
Hispanic	26	9
Non-Hispanic White	129	42
Other	12	4
Unknown	138	45
Sex		
Female	186	61
Male	119	39
Hospitalization overnight	0	0
Deaths	0	0